

A PREVENTIVE POINT OF VIEW

Edited by

HOWARD L. WARD, D.D.S., M.A., F.A.C.D.

*Professor and Chairman
Department of Preventive Dentistry
Head, Division of Health Services
Management
New York University College of Dentistry
New York, New York*

With the Assistance of

Harold Miller, D.D.S., M.P.H., F.A.C.D.

*Assistant Professor
Department of Preventive Dentistry
New York University College of Dentistry
New York, New York*

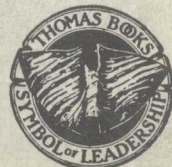
With a Foreword by

Alvin F. Gardner, D.D.S., M.S., Ph.D.

*Bureau of Medicine
Food and Drug Administration
Washington, D.C.*

This timely volume is a compilation of the current concepts, practices, and points of view in prevention presented by outstanding dental practitioners and educators. The orientation is not restricted to the oral cavity but encompasses those multiple medical-dental disciplines necessary to prevent disease and maintain total patient health care. Perspectives are presented on subjects which range from the philosophy of dental practice, the management of the handicapped patient, and the dentist's role in hypertension screening to the behavioral analysis of preventive dentistry.

American Lecture Series®



A PREVENTIVE POINT OF VIEW

Edited by

HOWARD L. WARD, D.D.S., M.A., F.A.C.D.

Professor and Chairman

Department of Preventive Dentistry

Head, Division of Health Services Management

New York University College of Dentistry

New York, New York

With the Assistance of

HAROLD MILLER, D.D.S., M.P.H., F.A.C.D.

Assistant Professor

Department of Preventive Dentistry

New York University College of Dentistry

New York, New York

With a Foreword by

Alvin F. Gardner, D.D.S., M.S., Ph.D.

Bureau of Medicine

Food and Drug Administration

Washington, D.C.



CHARLES C THOMAS • PUBLISHER

Springfield • Illinois • U.S.A.

Published and Distributed Throughout the World by
CHARLES C THOMAS • PUBLISHER
BANNERSTONE HOUSE
301-327 East Lawrence Avenue, Springfield, Illinois, U.S.A.

This book is protected by copyright. No part of it
may be reproduced in any manner without written
permission from the publisher.

© 1978, by CHARLES C THOMAS • PUBLISHER

ISBN 0-398-03616-0

Library of Congress Catalog Card Number: 76-44904

*With THOMAS BOOKS careful attention is given to all details of
manufacturing and design. It is the Publisher's desire to present
books that are satisfactory as to their physical qualities and artistic
possibilities and appropriate for their particular use. THOMAS
BOOKS will be true to those laws of quality that assure a good
name and good will.*

Printed in the United States of America
N-11

Library of Congress Cataloging in Publication Data

Main entry under title:

A preventive point of view.

(American lecture series; publication no. 1007)

Bibliography: p.

Includes index.

1. Preventive dentistry. I. Ward, Howard L., 1921- II. Miller,
Harold, 1918- [DNLM: Preventive dentistry. WU113 P946]
RK60.7.P73 617.6'01 76-44904
ISBN 0-398-03616-0

CONTRIBUTORS

JACK L. ANDERSON, D.D.S.

*Former Assistant Professor
Department of Pedodontics
University of Minnesota
School of Dentistry*

MILTON ARNOLD, D.D.S., A.M.

*Clinical Associate Professor
Department of Oral Diagnosis
New York University College of Dentistry*

RONALD BASSIUR, D.D.S., M.S.

*Clinical Assistant Professor of Periodontics
The Mount Sinai School of Medicine, New York City
City University of the City of New York*

CHARLES L. BERMAN, D.D.S., F.A.C.D.

*Clinical Professor and Chairman, Continuing Education Section
Fairleigh Dickinson University
School of Dentistry*

CAROL G. BIKOFSKY, B.S.

*Research Assistant, Department of Dental Ecology
Harvard School of Dental Medicine*

ROBERT C. BRACKETT, D.D.S., M.S.

*Graduate Faculty, Department of Periodontics
Loyola Dental School*

WILLIAM R. CINOTTI, D.D.S., F.A.C.D., F.I.C.D.

*Professor, Department of Prosthodontics
New Jersey Dental School*

PAUL F. DePAOLA, D.D.S., M.S.D., M.S., Hyg.

*Head, Dept. of Clinical Trials and Experimentation
Forsyth Dental Center*

JOHN A. DiBIAGGIO, D.D.S., M.A., F.A.C.D., F.I.C.D.
*Vice President for Health Affairs and
Executive Director of the Health Center
University of Connecticut*

R. THOMAS DUNKIN, D.D.S., F.A.C.D., F.I.C.D.
*Clinical Professor, Department of Periodontics
University of Pacific School of Dentistry*

FRANK A. FINNERTY, JR., M.D., F.A.C.P.
*Former Professor of Medicine
Georgetown University School of Medicine
Washington, D.C.*

HERBERT H. FROMMER, D.D.S., F.A.A.D.R.
*Associate Professor and Head of Radiology
New York University College of Dentistry*

DONALD B. GIDDON, D.M.D., Ph.D., F.A.C.D.
*Dean, New York University College of Dentistry
Professor, Department of Psychology, New York University
College of Arts and Sciences*

ARTHUR GRIEDER, D.D.S., F.A.C.D., F.I.C.D.
*Professor, Department of Prosthodontics
New Jersey Dental School*

SEYMOUR HOFFMAN, D.D.S.
*Professor of Pathology
University of Alabama in Birmingham*

ERIC JACKSON, B.D.S., Ph.D.
*Director, Dental Behavioral Science Laboratories
College of Dentistry, University of Florida*

ERWIN C. LUBIT, D.D.S., F.R.S.H.
*Associate Professor of Clinical Orthodontics
New York University College of Dentistry*

MILUTIN MIJUSKOVIC, D.D.S.
*Assistant Professor, Department of Preventive Dentistry
New York University College of Dentistry*

HAROLD MILLER, D.D.S., M.P.H., F.A.C.D.
*Assistant Professor, Department of Preventive Dentistry
New York University College of Dentistry*

MARVIN MOSER, M.D., F.A.C.P.

Clinical Professor of Medicine

New York Medical College, Valhalla, New York

Senior Medical Consultant, National High Blood Pressure Program

National Heart, Lung and Blood Institution N.I.H.

STEPHEN J. MOSS, D.D.S., M.S., F.A.C.D.

Chairman, Department of Pedodontics

New York University College of Dentistry

ELBERT A. POWELL, D.D.S., M.P.H.

Associate Professor of Behavioral Sciences and Community Health

The University of Connecticut Health Center

School of Dental Medicine

LAKSHMAN PRASAD, B.D.S.

Clinical Fellow in Dental Ecology

Harvard School of Dental Medicine

DONALD A. ROLFS, D.D.S.

Instructor in Preventive Dentistry

Department of Periodontics

University of Washington, School of Dentistry

SYDNEY A. ROSE, D.D.S., F.A.C.O.M.S.

Associate Professor, Department of Oral Surgery

New York University College of Dentistry

SHELDON ROVIN, D.D.S., M.S.

Dean, School of Dentistry

University of Washington, School of Dentistry

ALLAN SCHULMAN, D.D.S., M.S.

Associate Professor, Department of Dental Materials Science

New York University College of Dentistry

STEPHEN L. SILBERMAN, D.M.D., Dr. P.H., F.A.G.D.

Associate Professor, Department of Community and Oral Health

University of Mississippi Medical Center

SIDNEY I. SILVERMAN, D.D.S., F.A.C.D.

Professor and Chairman, Department of Removable Prosthodontics

New York University College of Dentistry

SHELDON L. SOBEL, D.D.S., F.A.G.D.

Former Clinical Associate Professor

Director of Special Care Clinic

New York University College of Dentistry

WILLIAM J. UPDEGRAVE, D.D.S., F.A.C.D., F.A.A.O.R.

Director, Dental Radiology

L.D. Pankey Institute for Advanced Dental Education

Professor Emeritus, Department of Dental Radiology

Temple University School of Dentistry

LOIS WINTER, M.A.

Lecturer, Department of Preventive Dentistry

New York University College of Dentistry

SAMUEL J. WYCOFF, D.M.D., M.P.H., F.A.C.D.

Chairman, Division of Preventive Dentistry and Community Health

University of California School of Dentistry

Former Dean of the University of Southern California Dental School, Doctor John I. Ingle, expressed his opinions and philosophy toward prevention in an article published in the *Los Angeles Times*, 1974. In it he stated:

We can do something, and we can start doing it right away. We can prevent this nation's horrendous flood of disease, deformity, disfigurement, dismemberment, and earlier death. I believe that, instead of patching people, we need to concentrate on an all-out program of prevention.

Our citizens are becoming accustomed to annual physical exams, and frequent eye and dental tests. But what I'm proposing goes much further than this. I am speaking of a massive effort to make prevention our No. 1 health priority, going all out to prevent diseases and accidents before they happen, rather than just detect them after they occur.

A total program, however, will come to pass only when the public, the government, and the medical profession acknowledge that health is the nation's—and the individual's—most important asset; that material wealth, or love, or happiness is nothing without good health.

The country needs to get behind such an all-out program in prevention. By so doing, perhaps someday we health workers could consider ourselves part of the health profession rather than—as we are now—members of the 'sickness' profession.

JOHN I. INGLE, D.D.S.
*Senior Professional Associate
National Academy of Sciences
Institute of Medicine*

FOREWORD

SUCCESS IN MODERN dental practice is dependent upon biologic as well as mechanical considerations. The interdependence of dentistry on oral biology is so great that dentists are turning to oral biologists and oral biologists to dentists in order to understand the local and systemic basis of oral disease. The oral biologic processes are currently becoming sound foundations for clinical dentistry resulting in a rather rapid extension of postgraduate instruction. Therefore, each of the books in the American Lectures in Dentistry series unravels the oral mechanisms and provides the clinical management of many problems which have existed for decades.

The American Lectures in Dentistry series is charged with providing the most current concepts for the continuing education of the dental practitioner, prepared *de rigueur* by the highly qualified oral *Wissenschaftler*. A tradition will be established of offering comprehensive surveys of recent insights and developments in the various fields of clinical dentistry while presenting self-contained, independent presentations directed to the general practitioner and specialist.

Based upon principles of competence and commitment, the series will show that dental problems can be solved and will contribute to their solution, having a commitment of time and energy in the search for answers.

Dentistry is both a science and an art which fulfills a social function. This series will, therefore, encompass clinical, oral biologic, and social topics which are most applicable to the general practitioner of dentistry. It is our hope that the efforts of the contributors will assist the dental practitioner in fulfilling his responsibility to his patients. The American Lectures in Dentistry will serve as extremely practical references both to aid the dental practitioner to resolve some of the problems encountered in the practice of dentistry and to broaden the horizons of those progres-

sive dentists who desire the postgraduate knowledge and continuing education presented in this series. Contributors will focus attention on those aspects of dental practice causing the general practitioner the greatest concern and difficulty. Their observations of new oral diagnostic problems, techniques, instrumentation, and therapeutic measures beneficial to dentists seeking to attain the best possible treatment for their patients. It is hoped that a tradition will develop whereby the American Lectures in Dentistry serves the dental practitioner and the dental specialist alike.

Continuing education is dependent upon communicating the newer concepts in dentistry to the dental practitioner. It is hoped that this series will provide that important link of communication and result in better patient care. This series will attempt to put the written current concepts into dental practice and therefore combat obsolescence. The editor and publisher are interested in encouraging the correlation of oral biologic principles with the clinical problems encountered by the dental practitioner who will base all his therapy on sound biologic concepts.

The undergraduate education of a dental practitioner includes, in part, the development of his knowledge and skills. The continuing education of a dental practitioner includes the further development of his knowledge and skills by means of advanced educational programs which have a profound influence on the dentist's services. This series is predicated on the concept that continuing dental education is no longer confined to a select few, but rather is a requirement for every present and future member of the dental profession.

Dramatic changes taking place in dental care and the unprecedented growth of scientific knowledge now being applied to dentistry will create tremendous changes in the art and science of dentistry, influencing the future of dental practice. It is not humanly possible to assimilate all of the knowledge in dental school that will be needed for the practice of dentistry. In addition, new knowledge is increasing at a rapid rate. Therefore, the dental practitioner can only keep abreast of the time by showing an initiative for self-learning. It is our hope that the American Lec-

tures in Dentistry will stimulate the inquiring mind and provide the dental practitioner with a foundation in basic and new knowledge, skills, and attitudes of dentistry upon which he can prepare himself for dental practice in current and future years.

The modern-day dental practitioner is in need of every opportunity possible to extend his knowledge and clinical experience. It is the purpose of the American Lectures in Dentistry series to represent one kind of continuing education which will be readily available to him. This series places emphasis upon the fact that dental knowledge is not a rapid, fully elaborated system of facts, but rather one that is dynamic and constantly changing as new facets of knowledge are developed into the mosaic pattern of the whole.

Doctor Howard L. Ward presents the book, *A Preventive Point of View*, which points to fields of interest that are likely to be a major concern to the practicing dentist in his attempt to understand the patient and his oral disease. The remarkable scientific advances which have flourished in the laboratory and clinic have been exceedingly well integrated into clinical dentistry by Doctor Ward and his excellent contributors. Preventive dentistry is a widely comprehensive area of general dentistry. Its focus, however, is based on an holistic approach to treat the entire patient; its effectiveness is in direct proportion to one's skill in recognizing and dynamically meeting the total dental needs of the patient. During the past decade it has been vividly shown that cooperative ventures have decided value in solving a dental problem. This work demonstrates the latter finding.

The present pace of activity in preventive dentistry virtually demands a frequent survey for the dental practitioner. One can readily demonstrate that unbeatable approach for progress in preventive dentistry can be based upon answers from a carefully collected body of data which have been obtained in response to a series of incisive questions from new and different points of view. In organizing this monograph, the editors and contributors have attempted to paint with a very broad brush and have called upon experts from a number of areas to participate. The result is an expression of the breadth and scope of preventive dentistry, as I

view it. While it is apparent that gaps in our knowledge exist, the data base is available upon which to present continuing education for the general practitioner. For all those who practice dentistry, regardless of their specialty, this monograph is a primary source for organized and applicable knowledge of preventive dentistry.

ALVIN F. GARDNER

Editor, American Lectures in Dentistry

PREFACE

THIS BOOK HAS BEEN PREPARED in response to the need for a practical text on preventive dentistry and its implications within the dental profession. It attempts to give those who have been confronted with the problem of prevention and health the opportunity of expressing their varying opinions or points of view in a particular phase of theory or practice, despite seeming redundancies.

Acknowledging the considerable impact of plaque control and its significance to the practitioner and the patient, we have expanded our concepts to include prevention in its broadest sense. We have recognized the inherent interdisciplinary nature of prevention to include concepts far beyond the current concept of plaque control.

These presentations endeavor to clarify major health problems that are currently being evaluated. The authors do not consider this data to be the "final word," but it is based on today's interest, significant research studies, and practical experience in the field of prevention.

The reader should keep this in mind and be flexible in the development of his or her personal philosophy of prevention, ever ready to redirect his or her efforts to keep pace with change.

The challenge of correlating the interrelationships of oral and systemic diseases must be answered if we are to meet the increasing health needs of our patients and communities.

We address ourselves to this responsibility by introducing those problems and points of view, which may offer new directions in meeting and resolving these problems.

A Preventive Point of View and the entire American Lectures in Dentistry series are dedicated to the goal of extending both theoretical and clinical knowledge to the dental practitioner.

HOWARD L. WARD

CONTENTS

	<i>Page</i>
<i>Contributors</i>	v
<i>Foreword</i>	xi
<i>Preface</i>	xv
 <i>Chapter</i>	
1. APPLIED PREVENTION — John A. DiBiaggio	3
2. PREVENTION PRACTICE MANAGEMENT — Robert C. Brackett ..	12
3. IS PREVENTION SOMETHING SEPARATE IN PRIVATE PRACTICE? — R. Thomas Dunkin	32
4. PREVENTION — A NEW DIMENSION IN PRACTICE MANAGE- MENT — Lois Winter	58
5. MISE-EN-SCÈNE — THE DENTAL OFFICE — Harold Miller ..	70
6. BEHAVIORAL SKILLS FOR THE PRACTICING DENTIST — Eric Jackson	76
7. A BEHAVIORAL SCIENCE ANALYSIS OF PREVENTIVE DENTISTRY — Donald B. Giddon, Stephen L. Silberman, Lakshman Prasad, Carol G. Bikofsky	93
8. PERSUADING FOR PREVENTION: A PRACTICAL DISCUSSION OF THE PRINCIPLES OF PERSUASION WHICH APPEAR TO BE MOST EFFECTIVE WITH YOUNG CHILDREN — Stephen J. Moss	108
9. CONTRAINDICATIONS TO PLAQUE CONTROL INSTRUCTION — Donald Rolfs, Sheldon Rovin	119
10. THE USE OF FLUORIDES IN THE DENTAL OFFICE — Paul F. DePaola	143
11. PIT AND FISSURE SEALANTS — Allan Schulman	179
12. AGENTS FOR THE PREVENTION OF DENTAL DISEASE — Samuel J. Wycoff	188
13. CURRENT RESEARCH TRENDS IN PREVENTIVE DENTISTRY — Seymour Hoffman	206

<i>Chapter</i>	<i>Page</i>
14. PREVENTIVE RADIOLOGY — Herbert H. Frommer	231
15. QUALITY RADIOGRAPHY — A KEY TO PREVENTION — William J. Updegrave	262
16. THE BASIS FOR PREVENTIVE CARE FOR THE SMALL CHILD — Jack L. Anderson	286
17. PREVENTIVE PROSTHODONTICS — Sidney I. Silverman	300
18. MUTUAL PROTECTORS OF THE MASTICATORY ORGAN — William R. Cinotti, Arther Grieder	311
19. A PUBLIC HEALTH APPROACH FOR THE PREVENTION OF CARIES — Elbert A. Powell	373
20. APPLYING PREVENTIVE DENTISTRY TO THE CLEFT PALATE PATIENT — Erwin C. Lubit	397
21. OFFICE MANAGEMENT OF THE HANDICAPPED PATIENT — Sheldon L. Sobel	425
22. BRUXISM — DIAGNOSIS FOR CONTROL IN A PROGRAM FOR PREVENTION — Milton Arnold	438
23. HYPERTENSION DETECTION AND CONTROL BY THE DENTAL PROFESSION — Charles L. Berman, Frank A. Finnerty, Jr., Marvin Moser	484
24. DENTIST: DIAGNOSTICIAN, MASTER CLINICIAN — Milutin Mijuskovic	510
25. NUTRITION AND ORAL MEDICINE: A SELECTIVE PREVENTIVE POINT OF VIEW — Ronald Bassiur	519
26. PREVENTION OF PATHOLOGIC PHYSIOLOGY — Sydney A. Rose	551
<i>Index of Names</i>	563
<i>Subject Index</i>	567

A PREVENTIVE POINT OF VIEW

